

**WHAT IS CLAIMED IS:**

1. A device for treating a temporomandibular joint, comprising:

first and second pads (5), wherein said first and second pads comprise a

5 cavity, wherein said cavity is filled with fluid (F), wherein said first and second pads (5) are connected to each other by means of a tube (7), wherein said first and second pads (5) comprise means (1, 3, 4, 8) for clamping said pads (5) on a posterior tooth (Z).

2. The device of claim 1, wherein said first and second pads are formed by an

10 envelope produced from a flexible material.

3. The device of claim 1, wherein said means for clamping comprise at least one

clip (8) bent in a way that corresponds to the contour of the posterior tooth (Z).

15 4. The device of claim 1, wherein said means for clamping comprise at least two

clips (8) bent in a way that corresponds to the contour of the posterior tooth (Z).

5. The device of claim 1, wherein the clip (8) is cast into a clamping shoe (1),

wherein said clamping shoe (1) is produced from plastic.

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6. The device of claim 5, wherein the clamping shoe (1) is formed in a U profile

with one or more legs (3, 4) extending from a base area (2).

7. The device of claim 6, wherein the height (H) of said one or more legs (3, 4)

25 corresponds to the height of the posterior teeth (Z).

8. The device of claim 6, wherein said one or more legs (3, 4) comprise a buccal

leg (3) and/or a lingual leg (4).

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9. The device of claim 8, wherein said tube (7) is fastened to said buccal leg (3)

of said clamping shoe (1).

10. The device of claim 8, wherein said tube (7) is connected to a passage (6) extending through said buccal leg (3) to said pad (5).

5 11. The device of claim 10, wherein the connection of said tube (7) to said passage (6) is located at one end (E) of said buccal leg (3).

12. The device of claim 5, wherein said clamping shoe (1) is produced in an integral form with at least one of said pads (5).

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13. The device of claim 5, wherein said clamping shoe (1) is produced by thermoforming or by injection-molding.

14. The device of claim 5, wherein said plastic is transparent.

15. The device of claim 1, wherein said first and second pads are positioned on the occlusal surfaces of the posterior teeth (Z) of the left-hand and right-hand sides of a mouth.